

REMARKS

Claims 1 – 23 are pending in the application, of which all are rejected. In the present response claims 1, 3, 4, 9, 14, 16, 19 and 23 are amended and claims 2, 7, 10, 13, 15 and 22 are canceled.

Drawings

The drawings were objected to by the Examiner due to lack on figures 1-3 of the legend “prior art”. Amended drawings are included with this response and thus the present objection is believed to be overcome.

Claim Rejections – 35 USC 102 and 103

In this section of the official action, Claims 1 – 2 and 5-23 were rejected under 35 USC 102(e) as being unpatentable over Rocanova U.S. Patent 6,522,658. Favorable reconsideration of this rejection is respectfully requested since, as will be shown below, it is believed that the claims as amended now describe a system which is fundamentally different from Rocanova.

Rocanova discloses a system in which the type of data being sent is examined to determine the QoS requirements thereof. That is used as a basis for deciding which kind of satellite to use and the data is encoded accordingly. Reference is made to Fig. 1 of Rocanova and particularly to the network routing device 14. This single device apparently has direct antenna connections to both kinds of satellites and simply makes an automatic selection of which to use for any given data. Transmitting device 12 is a user device so that it is clear that Fig. 1 is taken from the user end. That is to say network routing device 14 is most closely equivalent to antenna 34 in Fig. 4 of the present application and neither the hub teleport 40 nor the LEO terrestrial

gateway or their equivalents (again see Fig. 4 of the present application) are considered. That is to say, Roccanova is simply concerned with the user end and the issue of enabling the user to make use of whichever of GEO and LEO capacity is most important for his QoS requirements, specifically in the direction of user to provider.

In fact Roccanova states, in column 3 line 30 thereof that he envisions that the network routing device can also receive from either satellite system, but he makes no comment as to how this can be achieved. The reason that Roccanova cannot provide an outward link from the service provider to the user that can use either network is simply that it is not sufficient, as he states in his next sentence that “the satellite completes a virtual circuit connection between the network routing device 14 and one of a plurality of other ground stations...”.

If the outbound link, that is from the service provider to the consumer is to work successfully using both of the satellite networks then it is necessary that the communication is controlled from one location and that a high capacity link is provided to the other link. That is to say it is necessary to provide a high capacity link between the GEO and below GEO satellite infrastructures so that outbound data can be sent as desired via one or the other. Without this key feature, that is to say without a complete virtual circuit that links remote gateway 34, the GEO satellites, the below GEO satellites, the Hub teleport 40, and the below GEO terrestrial gateway (24 in Fig. 4) the interoperability on the outward leg does not work, and in fact it does not work particularly well on the return leg either, since it is not clear from Roccanova what the return data does once it gets to the various ground stations which are continuously labelled as not shown.

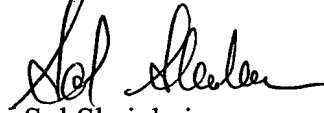
In the present invention, as now introduced into each of the independent claims, it is now clearly defined that the GEO and below GEO hubs are linked by Internet backbone infrastructure, thus completing the virtual circuit referred to above.

Neither Roccanova nor any of the citations make the suggestions that a complete virtual circuit should be made between the remote gateway or user end, the GEO infrastructure, and the below GEO infrastructure. It is believed that such a virtual circuit is the only way in which to effectively provide real integration between the two satellite infrastructures, allowing either of them to be used at will in either direction or in combination. Thus only the present embodiments can send and receive via the GEO route, and additionally send via the below GEO route. Thus the present embodiments can actually send via both networks simultaneously, whereas Roccanova has to choose one or the other at any given time because he does not have a link between the two infrastructures. In any case, as stated, the Roccanova disclosure cannot in practice manage the outward direction at all. The features which are not present or derivable from Roccanova are also not present in Olds, US Patent No. 5,887,257.

In accordance with the reasons outlined above it is therefore believed that independent claims 1, 9, 14 and 19 are both novel and inventive over the cited prior art. It is further believed that the dependent claims are allowable as being based on allowable main claims.

In view of the foregoing, it is submitted that all of the issues raised by the Examiner are successfully overcome. All the claims now pending in the application are believed to be allowable over the cited references. An early Notice of Allowance is therefore respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Sol Sheinbein', written in a cursive style.

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